



INDIANA DEPARTMENT OF TRANSPORTATION

Driving Indiana's Economic Growth

Memorandum

May 14, 2007

CONSTRUCTION MEMORANDUM 07-10

TO: District Deputy Commissioners
District Highway Operation Directors
District Construction Engineers
District Testing Engineers
District Area Engineers
Project Engineers/Supervisors

FROM: Mark A. Miller, Director *MAM*
Division of Construction Management

SUBJECT: Clarification on Mandrel Testing of Pipes

Our current specification 715.09 addresses backfilling of all pipes. INDOT also has a recurring Special Provision that is included in contracts (715-R-536) which modifies our current specification by including the following language in the specification dealing with inspection and testing of pipes:

"All pipes, except underdrains, will be visually inspected for acceptance a minimum of 30 days after the completion of the backfill operations. Pipes that cannot be visually inspected shall be video inspected for acceptance in accordance with 718.07. The Engineer will determine the sections of pipe to be video inspected."

"After the visual or video inspection, all polyethylene and smooth wall polyvinyl chloride pipes 36 in. (900 mm) or less in pipe pay item diameter shall be mandrel tested."

"If the mandrel does not pass through the pipe when pulled by hand or the mandrel damages the pipe, the deficient pipe shall be removed, replaced, and mandrel tested a minimum of 30 days after the backfill has been replaced."

The problem that has occurred in the field is that contractors have been approaching Project Engineers/Supervisors wanting to perform the mandrel testing of the pipes as soon as they have completed their backfill operations. This office has reviewed the above Special Provision and we feel that it is very clear that the visual inspection, video inspection and mandrel testing of the pipes are not to be performed until the backfill operation is at least 30 days old. The statement in the specification of "a minimum of 30 days after" means that testing of whatever kind cannot occur before 30 days or that at a minimum, 30 days must pass before inspections/mandrel testing can be performed.

Hopefully this memorandum will help Project Engineer/Supervisors better explain to contractors that inspections/mandrel testing cannot be performed upon completion of backfill operations.

MAM:dak